REMARKS

ALLOWABLE CLAIMS

Pursuant to the Advisory Action of February 28, 2002, the double patenting rejections have been withdrawn.

Accordingly, claims 1, 2, 5 and 25-27 are not subject to any rejections, and should be allowable without further argument.

35 USC §102 REJECTIONS OVER US PATENT NO. 5,962,921 TO FARNWORTH ET AL.

Claims 6-12, 17, 18, 31 and 32 have been rejected under 35 USC §102(e) as being anticipated by US Patent No. 5,962,921 to Farnworth et al.

The rejections under 35 USC §102 are again traversed as Farnworth et al. '921 does not disclose or suggest all of the limitations recited in independent claims 6, 12, 31.

In support of the 35 USC §102 rejections the Advisory Action states:

> "Farnworth et al. continues to read on each of the rejected claims. Attention is directed to Figures 7, 7A and 7B which shows flexible leads 48F cantilevered over a recess (22F, 32F) which supports a bumped contact 12. Figure 7B depicts the flexible leads having a radius of curvature and shape that is substantially equal to a radius of the bumped contact. Moreover the flexible leads inherently possess a modulus of elasticity selected to provide a desired spring constant."

Admittedly the contact member 22F shown in Figures 7-7C of Farnworth et al. '921 includes a recess 32F, and blades 48F having a radius of curvature approximately equal to the radius of curvature of the bump 12 (column 9, lines 35-56). However, the blades 48F in Farnworth et al. '921 cannot move, as they comprise portions of the substrate 30F, that are etched at the same time as the recess 32F. The blades 48F are thus not "cantilevered", "flexible" or "movable" as with the present leads.

As support for these assertions, column 9, lines 36-38 of Farnworth et al. '921 state:

"Contact member 22F can be formed substantially as previously described for contact member 22E (Fig. 6)".

Column 9, lines 27-32 of Farnworth et al. '921 state:

"In particular, the contact member 22E comprises a recess 32E etched into a substrate 30E and covered with a conductive layer 34E. In addition, the contact member includes a pattern of blades 48E. However, in this case an isotropic etch process can be used to form the recess and blades 48E." (underlines added)

In contrast, rejected independent claims 6 and 31 state that the "flexible leads" are "cantilevered over the recess", and are configured "to move within the recess by a distance sufficient to accommodate variations in a size, a shape or a planarity of the bumped contact".

Rejected independent claim 12 states that the leads are "cantilevered over the recess", and are configured "to move in a z-direction within the recess to accommodate variations in a height or a diameter of the bumped contact."

These limitations are not suggested by Figures 7-7C of Farnworth et al., '921, are not suggested by the written description in Farnworth et al. '921.

The advantage of the present flexible leads is that variations in the size, shape and planarity of the bumped contacts 16 can be accommodated. For example, note in Figure 3B of the present application where the bumped contact 16 is supported by the leads 22B but can still move within the recess 20B. Compare Figure 7B of Farnworth et al. '921, where the bump 12 bottoms out in the recess 22F, with the stationary blades 48F penetrating into the bump 12. The blades 48F aren't free to move within the recess 22F and may not be able to accommodate a grossly undersized bump 12.

In addition to not disclosing limitations in independent claims 6, 12, and 31, Farnworth et al. also does not disclose

limitations in the dependent claims. For example, dependent claim 7 recites "each lead includes at lead one projection configured to penetrate the bumped contact". In this regard, see Figure 3B and blades 28B (projections) in the present application. In contrast, in Farnworth et al. '921 the blades 48F do not include penetrating projections.

Dependent claims 9 and 18 state that the leads include "an enlarged portion on the substrate and a terminal portion cantilevered over the recess for contacting the bumped contact". In this regard see Figure 3A of the present application. This construction provides more flexibility for the cantilevered portions of the flexible leads 22B. Again Farnworth et al. '921 does not suggest this limitation.

In view of the non disclosure of these limitations by Farnworth et al. '921, claims 6-12, 17, 18, 31 and 32 are submitted to be both novel and unobvious over Farnworth et al. '921.

CONCLUSION

In view of the above arguments, favorable consideration and allowance of claims 1, 2, 5-12, 17, 18, 25-27, 31 and 32 is requested. Should any issues remain, the Examiner is asked to contact the undersigned by telephone.

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March 28, 2002
Date of Signature

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